

SWAYAM Platform of Distance Learning: A Perceptual Study

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Abstract: Education has a prime importance in the economic growth and in the form of a constructive education; SWAYAM platform which is one of the largest platforms for MOOCs in India is giving a lifelong learning opportunity through distance mode. Government of India has tried to provide an interactive open education interface. Though SWAYAM is very near to the heart of government but what actual users perceive about it should be known. In this context, it becomes important to know what perception teachers and students have regarding SWAYAM. Taking a sample of teachers and students, core dimensions for the perception of teachers and students for the SWAYAM Platform of learning is found using a self-designed questionnaire. More than 70% of the respondents are spending time for SWAYAM courses and they are agreed that it help to gain knowledge. Different determinants forming the perception of teachers and students are found in the study. Results indicated that though Swayam courses are considered as flexible, innovative, interactive, and easy tool but it do not lead to employability and may be difficult to use. The study will act as the guideline for preparing policies taking into account the perceptual factors of both teachers and students on the favorable use of SWAYAM. Further, practical implications and recommendations are presented for higher education ministry for making SWAYAM MOOCs as the fruitful one.

Keywords: MOOC, SWAYAM, Distance Education, Learning, Innovation, Perception

I. INTRODUCTION

One of the numerous issues that worry educational patrons in Higher Education (HE) institutions is Digitalization. Digital Expertise is getting progressively important in the work environment. E-learning market in India is evaluated at more than 3 billion at present. E-learning has concentrated on SWAYAM and how it is altering the Indian online instruction segment. Massive Open Online Courses (MOOC) stage 'SWAYAM' has more than 2,000 courses for up to 3 crore understudies the nation over. Various approaches, activities, and techniques are as of now being proposed in India by "SWAYAM (Study Webs of Active-Learning for Young Aspiring Minds)":

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Mohapatra & Mohanty (2016) [25]. tending to instructive innovation developments in higher training (SWAYAM Information Booklet, 2018) [39]. Looking into the growing importance of SWAYAM [38], this research work focuses on studying the perception of Teachers and Students for the SWAYAM Platform for engaging in MOOCs by blending academics with technology [26].

II. MAJOR EXISTING RESEARCH WORKS REVIEWED

The developing populace, the absence of framework, and lack of encouraging cliques and different assets have consistently made obstacles during the time spent conferring information in India (Mohapatra & Mohanty, 2016). Separation of learning from schools and instructors has always been considered as wasteful as well as insufficient (Rao, 2006 in Mohapatra & Mohanty, 2016) [24]. In Online learning [41], both students and teachers have a critical job [35]. The educator has the full information [40], dedication, abilities, and legitimate direction of the subject as well as the motivation (Wu & Hiltz, 2019) [45]. Clark (2002) recommended that the student has a greater part than the educator [7], if the student is dynamic, self-roused, centered [34], and dedicated distinctly then he can learn (Sofat & Sharma, 2020) [36]. SWAYAM tries to connect the advanced gap for students who have heretofore stayed spick-and-span by the advanced transformation and have not had the option to join the standard of information [6]. SWAYAM is intended to accomplish the three fundamental standards of instruction policy viz [37], access, value, and quality (Malik, 2015; Singh, 2019; Khan et al., 2021) [13], allowing students to access quality learning courses (Conole & Weller, 2008; Sabitha, 2015) [8]. MOOCs like SWAYAM courses help teachers and students in lifelong learning [33], knowledge acquiring at any place and time (Arthur-Nyarko et al., 2020; Kukulska-Hulme [12], 2009 in Kumar & Mahendraprabu, 2021) [5], and reduced prices and sometimes even without any charge [22]. Platforms like SWAYAM are beyond the physical and social barrier [16], providing fine education as per their time and place flexible requirements (Lim et al., 2019; Ren, 2019; Shams [17], Haq & Waqar, 2020) [21]. SWAYAM is convenient [30], and easily accessible [32], leading to starting of education on the SWAYAM program by many institutions (Arokiya Raj & Aram, 2019; Thakur, 2018) [4][42]. Both faculty and students have acknowledged and praised the SWAYAM platform for its ease of use [27], and flexibility but there are certain limitations as well like lack of face-to-face interaction and connectivity issues (Sa & Serpa, 2020) [28].

III. OBJECTIVES

To study the factors forming perception of teachers for SWAYAM Platform of learning To study the factors forming perception of

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students for SWYAM Platform of learning

was used for sample selection survey method using a standardized questionnaire (validated again in the Indian context) for measuring Student and Teacher perception of the usage of SWAYAM platform for learning. More than five hundred questionnaires were sent via email and WhatsApp to get the data filled from students. Finally, two hundred filled questionnaires were found usable for further analysis. Similarly, with teachers, the majority of the questionnaires were not received back. The research proceeded with two hundred filled questionnaires of teachers.

IV. RESEARCH METHODOLOGY

The research was descriptive. The population of all the teachers and students residing in different regions of Rajasthan. The sample size was four hundred respondents which included two hundred teachers teaching at the college level and two hundred students who have passed out from schools. Non-probability convenient sampling technique

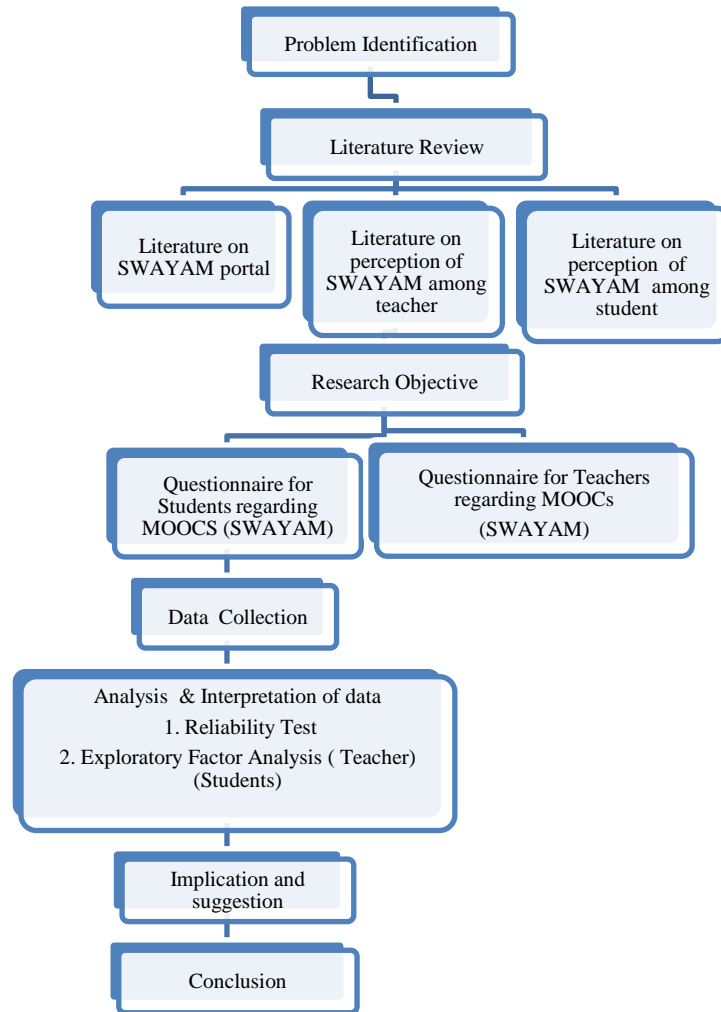


Figure1. Schematic Diagram for Research Process.

Reliability Statistics

Table 1. Reliability statistics

Name of Variables	Cronbach's Alpha	No. of Items
Student Perception	0.713	24
Teacher's Perception	0.859	39

The questionnaires for Student and Teacher's perception were reliable for using them analysis as indicated by reliability statistics of .713 and .859 (Chronbach alpha value; refer to table 1).

Sample Adequacy

The sample of students and teachers was adequate for further application of Exploratory factor analysis and the

responses matrix in the non-identity matrix indicate by chi-square value and significance (refer to table 2).

Table 2. Sample adequacy

Variables	No. of responses	Mean	Standard Deviation	KMO Value	Chi-square and Sig Level
Student (College) Perception	200	93.34	6.84681	0.66	1.549E3 @ .000
Teacher's Perception	200	149.355	12.47748	0.612	2379.237@.000

Exploring Factors

The exploratory factor analysis was applied in PASW_18 software for undermining the factors of student and teacher perception. Fourteen factors were found forming the perception of teachers for the SWAYAM platform. No items converged for factors number eight, ten, twelve, and thirteen.

Finally, ten factors were considered for the perception of teachers. These factors are Active and Comprehensive Learning, Unconventional, Convenient but Boring, Popular,

Blended and Effective learning, Professional & Ethical Learning for Varied interest groups, Organized and futuristic Learning, Understanding Issues, and Management in different Context, Videos with Caption but no interaction, Self-paced learning, Technical Know-how and Earn credits. Eight factors were found forming the perception of students for the SWAYAM platform. These factors are Innovative Learning Approach, Interactive and Easy, Flexible Learning, Technology-based and Self-Paced, less employability and difficulty of use, Help to study, Good Experience, and Immediate Feedback.

Table 3: Factor Description (Student Perception)

Name of Factor	Total Eigen Value	% of Variance	
Factor 1: Innovative Learning Approach	2.305	9.605	Q9: Studying through SWAYAM mode can increase my learning effectively ,as I will have easy access to learning materials (e.g. reading documents and recorded videos)
			Q15: I like the idea of SWAYAM.
			Q16: I think SWAYAM is an innovative concept and must be encouraged.
			Q18: I was ever encouraged to try using SWAYAM for studies.
			Q17: A family member said they think using SWAYAM is a good idea
			Q22: I don't believe SWAYAM is suitable for courses that need practical demonstrations.
Factor 2: Interactive and Easy	1.988	8.285	Q4: There are electronic tools available to enable interactive communication between instructor and student without meeting face-to-face.
			Q6: I believe I can have live lectures over the internet, as is done in the classroom
			Q14: It would be easy for me to find necessary information when using an SWAYAM platform.
			Q24: I will use SWAYAM in the future for studies.
Factor 3: Flexible Learning	1.9	7.917	Q1: studying through learning mode provides the time flexibility to the student.
			Q5: There can be interactive communication among students when participating in SWAYAM
			Q11: Learning electronically can improve my course performance as I will not need to travel to campus, but study at the comfort of my home.
Factor 4: Technology based and Self Paced	1.592	6.635	Q12: Using SWAYAM system can enable me to accomplish tasks more quickly, since I will move at my own pace.
			Q3: There are technologies available to enable one to take tests and submit assignments electronically.
			Q13: It would be easy for me to find necessary information when using an SWAYAM platform
Factor 5: Less employability and difficulty of use	1.554	6.475	Q10: Learning electronically can improve my course performance as I will not need to travel to campus, but study at the comfort of my home.
			Q21: Have seen a media publication hate using SWAYAM for studies is good.
			Q20: Somebody ever used SWAYAM and told me is difficult to use.
			Q8: I don't foresee any usefulness of SWAYAM.
Factor 6: Help to study	1.013	4.22	Q23: I am afraid employers will not give the same preference to SWAYAM graduates, as they will give to people who have conventional classroom learning.
			Q2: SWAYAM can enable people to study, irrespective of where they are located in the world.
Factor 7: Good Experience	0.996	4.15	Q19: Someone ever used SWAYAM and told me is a good experience.

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Factor 8: Immediate Feedback	0.934	3.893	Q7: I can ask questions and get immediate feedback when studying in SWAYAM, just as is done in the classroom
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Factor Exploration: Faculty Perception

Table 4: Factor Description Faculty Perception Rajasthan

Name of Factor	Total Eigen Value	% of Variance	
Factor 1: Active and Comprehensive Learning	2.478	6.354	Q16: The suggestions given for further reading make study more comprehensive
			Q9: The concepts in courses are clarified with suitable examples.
			Q 11: The learners' activities specified in each module are useful for active learning.
			Q13: The learner feels presence in classroom teaching while viewing video lessons.
			Q 8; The written materials cover whole course and the language is simple.
			Q6; The SWAYAM Platform is the best alternative of higher education for students opting modular courses.
			Q14: The questions asked towards the end of each unit are useful to judge progress in studies.
			Q2: The SWAYAM Platform enables to develop management skills in school/college education.
Factor 2: Unconventional, convenient but boring	2.353	6.033	Q31: There may be many technological problems with the SWAYAM Platform
			Q33: It is difficult and boring to sit alone by the computer and to watch the videos
			Q29: One could repeat and watch the lecture again and again
			Q 28: The interface is friendly and convenient
			Q 35: SWAYAM platform is beneficial and it is better than conventional Education
			Q 37: I do think it is a new learning style and many people would find this helpful.
Factor 3: Popular, Blended and Effective learning	2.128	5.456	Q22: SWAYAM Platform Satisfies curiosity
			Q25: Personal goals can be achieved
			Q 27: I felt stressed about SWAYAM
			Q 36: SWAYAM is popular nowadays
			Q 38: It is an opportunity for anyone to learn a concept. I think that lifelong learning is something that should be done, not just to get more degrees.
			Q18: Blended approach of written text, video lesson and learning exercises are effective means for self-study
			Q20; SWAYAM facilitates studies through choice based credit system at higher education.
Factor 4 Professional & Ethical Learning for Varied interest groups	1.648	4.226	Q5: The SWAYAM Platform is beneficial to varied interest group of learners.
			Q3: The SWAYAM Platform is valuable for inculcating professional ethics among learners.
			Q4: The SWAYAM Platform is the best source of providing quality input for self study.
			Q 26: I felt uncertain about the course and its goals
Factor 5: Organised and futuristic Learning	1.517	3.889	Q21: SWAYAM Platform Prepares learners for the future.
			Q 17: The on-line study programme suits the study schedule.
			Q 23: SWAYAM has proper Organization and Workflow
			Q 30: The questions in the middle of the videos help concentrate
			Q32: There may be problems related to technical know-how of the SWAYAM Platform



Factor 6: Understanding Issues and Management in different Context	1.466	3.76	Q1: The SWAYAM Platform is useful to develop understanding of educational administration and management.
			Q10: The course content is relevant to understand context specific issues.
			Q15: The question answer exercises helps to get self-feedback.
Factor 7: Videos with Caption but no interaction	1.462	3.749	Q12: Viewing of video lessons provided clarity of concepts. Major learning points are suitably projected through captions. The visual images are useful in learning the concepts with clarity.
			Q34: learners lack interaction with the instructor
Factor 8	1.424	3.651	
Factor 9: Self-paced learning	1.177	3.019	Q7: One can learn at her/his own time and pace through SWAYAM Portal
Factor 10	1.131	2.9	
Factor 11: Technical Know how	0.979	2.511	Q32: There may be problems related to technical know-how of the SWAYAM Platform
Factor 12	0.93	2.386	
Factor 13	0.877	2.25	
Factor 14: Earn credits	0.821	2.106	Q39: The 'degree' doesn't seem to really get the student anywhere down the road.
			Q19: SWAYAM Programme is useful to earn additional credits.

V. CONCLUSION

The teachers and students with higher education have a different level of perception for SWAYAM Courses. To understand what factors determine the perception of both students and teachers, the study was done on the sample of students in higher education and teachers teaching there. SWAYAM provides free of cost courses which enhances the enrolment of students (Anand Shankar Raja & Kallarakal, 2020). SWAYAM courses gives this additional learning facility at home as per the convenience (Agnihotri & Pandit, 2021) [1]. SWAYAM offers deep sea of knowledge but proper awareness and seriousness is needed (Purkayastha & Sinha, n.d.). Students perceive the SWAYAM platform as the one with an innovative Learning Approach, Interactive and Easy (Phutela & Dwivedi, 2020) [29], Flexible Learning, Technology-based and Self-Paced (Singh et al., 2020), less employability, and difficulty of use (Ambadkar, 2020) [3], Help to study [31], Good Experience and Immediate Feedback [9]. This means that though they consider it as a flexible, innovative, interactive, and easy tool but perceive that SWAYAM courses do not lead to employability and may be difficult to use [10]. Teachers perceive the SWAYAM platform as the one giving active and comprehensive [11], Learning (Yuan & Shi-You, 2017) [46], unconventional (Varma & Kataria, n.d.) [43], convenient (Virani et al., 2020) [44] but boring, popular, blended (Kumar & Mahendraprabu, 2021; Law & Tang, 2020) and effective learning [20], professional & ethical learning (Mishra et al., 2020) [23] for varied interest groups [18], organized and futuristic learning (Aithal & Aithal, n.d.) [2], understanding issues and management in a different context, videos with a caption but no interaction, self-paced learning (Kundu & Bej, 2020) [19], technical know-how (Hassan & Mirza, 2021) and earn credits [14]. Though faulty perceive courses as comprehensive, professional, self-paced, and with variety but perceive that they are less interactive and sometimes may have understanding issues [15].

1. Research Implications

Research results emerged out as the positive perception indicator by both teacher and students. It is understood from the results that SWAYAM is a useful platform if keeping

oneself updated with the technological and education industry-related changes. Research indicates that the SWAYAM platform is a free-of-cost, flexible and blended learning platform benefiting the stakeholders. In the longer term, this platform will have a positive learning impact on the learning.

2. Practical Implications

Looking into the perception-forming factors, the study will act as the guideline for preparing policies taking into account the perceptual factors of both teachers and students on the favorable use of SWAYAM.

3. Social Implications

The study shows a new and positive social behavior being visualized by teachers and students towards blended learning opportunities in form of SWAYAM. In these tough times, SWYAM can emerge as an extremely beneficial learning opportunity.

4. Originality and Value

Perception is one of the most important aspects to be measured for students and teachers especially for online learning platforms like SWAYAM. The paper is the original and novel effort to determine the underlying factors forming perception for SWAYAM.

5. Suggestions

The study can be replicated in students at the school level, studying in secondary or senior level. Similarly, teachers teaching at school can also be involved. Further, deeper categorization of students based

on school-going, dropout, preparing for the competitive exam can be done. Differences amongst different genders, contextual differences, and such demographic variables can be included.

The study can also be done in in-depth interview form or in the experimental form including more variables like awareness, usefulness, and intention to use like variables for the SWAYAM platform. Further, more respondents can be added to the study.

REFERENCES

1. Agnihotri, M. A., & Pandit, A. (2020). Overview and future scope of SWAYAM in the world of MOOCs: A comparative study with reference to major international MOOCs. *Intelligent Systems Reference Library*, 169-201. https://doi.org/10.1007/978-981-15-8744-3_9
2. Aithal, P. S., & Aithal, S. (2020). Implementation strategies of higher education part of national education policy 2020 of India towards achieving its objectives. *International Journal of Management, Technology, and Social Sciences*, 283-326. <https://doi.org/10.47992/ijmts.2581.6012.0119>
3. Ambadkar, R. (2020). E-learning through SWAYAM MOOCs-awareness and motivation among commerce students. *International Journal of Scientific & Technology Research*, 9, 3529-3538.
4. Arokiya Raj, A. F., & Aram, I. A. (2019). Understanding open pedagogy for designing a constructivist learning in Indian MOOCs. 2019 *IEEE Learning With MOOCs (LWMOOCs)*. <https://doi.org/10.1109/lwmoocs47620.2019.8939616>
5. Arthur-Nyarko, E., Agyei, D. D., & Armah, J. K. (2020). Digitizing distance learning materials: Measuring students' readiness and intended challenges. *Education and Information Technologies*, 25(4), 2987-3002. <https://doi.org/10.1007/s10639-019-10060-y>
6. Chandra Mondal, G., & Majumder, P. (2019). Ecofeminism: Encouraging interconnectedness with our environment in modern society. *American Journal of Educational Research*, 7(7), 482-484. <https://doi.org/10.12691/education-7-7-7>
7. Clark, D. (2002). Psychological myths in E-Learning. *Medical Teacher*, 24(6), 598-604. <https://doi.org/10.1080/0142159021000063916>
8. Conole, G., & Weller, M. (2008). Using learning design as a framework for supporting the design and reuse of OER. *Journal of Interactive Media in Education*, 2008(1), 5. <https://doi.org/10.5334/2008-5>
9. Conrad, D., & Witthaus, G. (2021). Reimagining and reexamining assessment in online learning. *Distance Education*, 42(2), 179-183. <https://doi.org/10.1080/01587919.2021.1915117>
10. Conrad, D., & Witthaus, G. (2021). Reimagining and reexamining assessment in online learning. *Distance Education*, 42(2), 179-183. <https://doi.org/10.1080/01587919.2021.1915117>
11. Cormier, D., & Siemens, G. (2010). Through the open door: open courses as research, learning, and engagement. *Educause*, 45(4), 30-39. Retrieved on October 20th, 2010 from <http://www.educause.edu/EDUCAUSE+Review/EDUCAUSERevueMagazineVolume45/ThroughtheOpenDoorOpenCourses/209320>
12. Dave, C. (2008, October 2). Waiting for the redirect... *The CCK08 MOOC - Connectivism course*, 1/4 way. <https://davecormier.com/edb/2008/10/02/the-cck08-mooc-connectivismcourse-14-way>
13. Gamage, D., Staubit, T., & Whiting, M. (2021). Peer assessment in MOOCs: Systematic literature review. *Distance Education*, 42(2), 268-289. <https://doi.org/10.1080/01587919.2021.1911626>
14. Hassan, M. M., & Mirza, T. (2021). The digital literacy in teachers of the schools of Rajouri (J&K)-India: Teachers perspective. *International Journal of Education and Management Engineering*, 11(1), 28-40. <https://doi.org/10.5815/ijeme.2021.01.04>
15. Hollands, F. M., & Tirthali, D. (2014). Why do institutions offer MOOCs? *Online Learning*, 18(3). <https://doi.org/10.24059/olj.v18i3.464>
16. Khan, A. U., Khan, K. U., Atlas, F., Akhtar, S., & Khan, F. (2021). CRITICAL FACTORS INFLUENCING MOOCs RETENTION: THE MEDIATING ROLE OF INFORMATION TECHNOLOGY. *Turkish Online Journal of Distance Education*, 22(4), 82-101. DOI: <https://doi.org/10.17718/tojde.1002776>
17. Kukulska-Hulme, A., Sharples, M., Milrad, M., Arnedillo-Sanchez, I., & Vavoula, G. (2009). Innovation in mobile learning. *International Journal of Mobile and Blended Learning*, 1(1), 13-35. <https://doi.org/10.4018/jmbl.2009010102>
18. Kumar, K., & Mahendraprabu, M. (2021). Open educational practices of SWAYAM programme among research scholars. *Education and Information Technologies*. <https://doi.org/10.1007/s10639-021-10495-2>
19. Kundu, A., & Bej, T. (2020). Perceptions of MOOCs among Indian State University students and teachers. *Journal of Applied Research in Higher Education*, 12(5), 1095-1115. <https://doi.org/10.1108/jarhe-08-2019-0224>
20. Law, K. M., & Tang, L. T. (2020). Application of reflective journals to assess self-directed learning in a blended learning setting: A case study in Hong Kong. *International Journal of Innovation and Learning*, 27(2), 121. <https://doi.org/10.1504/ijil.2020.105075>
21. Lim, C. P., Ra, S., Chin, B., & Wang, T. (2019). Information and communication technologies (ICT) for access to quality education in the Global South: A case study of Sri Lanka. *Education and Information Technologies*, 25(4), 2447-2462. <https://doi.org/10.1007/s10639-019-10069-3>
22. Malik (2015). Indian MOOCs (massive open online courses): need of the hour. *International Journal of Applied Research* 2015, 1(11), 930-932
23. Mishra, L., Gupta, T., & Shree, A. (2020). Online teaching-learning in higher education during lockdown period of COVID-19 pandemic. *International Journal of Educational Research Open*, 1, 100012. <https://doi.org/10.1016/j.ijedro.2020.100012>
24. Mohapatra, S. (2013). Business school education and technology—a case study. *Education and Information Technologies*, 20(2), 335-346. <https://doi.org/10.1007/s10639-013-9287-3>
25. Mohapatra, S., & Mohanty, R. (2016). Adopting MOOCs for affordable quality education. *Education and Information Technologies*, 22(5), 2027-2053. <https://doi.org/10.1007/s10639-016-9526-5>
26. Muzafarova, T., & Kaya, E. (2014). Survey of Awareness of Massive Open Online Courses (MOOC)- a Case of International Black Sea University Students, Georgia. *Journal of Education*, 3(2), 15-19
27. Naresh K V (2020). A Study on Student Perception Towards Swayam (Online Learning) In Sub-Urban Mysore. *International Journal of Business, Management and Allied Sciences*, 7(3), 1-9.
28. O. Zawacki-Richter and A. Qayyum (eds.), Open and Distance Education in Asia, Africa and the Middle East, SpringerBriefs in Open and Distance Education, https://doi.org/10.1007/978-981-13-5787-9_4
29. Phutela, N., & Dwivedi, S. (2020). A qualitative study of students' perspective on E-Learning adoption in India. *Journal of Applied Research in Higher Education*, 12(4), 545-559. <https://doi.org/10.1108/jarhe-02-2019-0041>
30. Ren, X. (2019). The undefined figure: Instructional designers in the open educational resource (OER) movement in higher education. *Education and Information Technologies*, 24(6), 3483-3500. <https://doi.org/10.1007/s10639-019-09940-0>
31. Rupali S. Ambadkar (2020). E-Learning through Swayam MOOCs Awareness and Motivation among Commerce. *International Journal Of Scientific & Technology Research* Volume 9, Issue 02, February 2020 ISSN; 2277-8616
32. Sá, M. J., & Serpa, S. (2020). The COVID-19 pandemic as an opportunity to foster the sustainable development of teaching in higher education. *Sustainability*, 12(20), 8525. <https://doi.org/10.3390/su12208525>
33. Sabitha, A. S., Mehrotra, D., Bansal, A., & Sharma, B. K. (2015). A naive Bayes approach for converging learning objects with open educational resources. *Education and Information Technologies*, 21(6), 1753-1767. <https://doi.org/10.1007/s10639-015-9416-2>
34. Shams, S., Haq, M. A., & Waqar, Y. (2020). Open educational resources (OER) usage trends among university students of Pakistan. *Education and Information Technologies*, 25(6), 5637-5654. <https://doi.org/10.1007/s10639-020-10195-3>
35. Singh Nisha (2019). SWAYAM- Indian MOOCs: an insider's perspective. *Asian Journal of Distance Education*, 14(1), 47-55 Retrieved From: <https://www.asianjde.org/ojs/index.php/AsianJDE/article/view/301>
36. Singh, A., Sharma, S., & Paliwal, M. (2020). Adoption intention and effectiveness of digital collaboration platforms for online

- learning: The Indian students' perspective. *Interactive Technology and Smart Education, ahead-of-print*(ahead-of-print). <https://doi.org/10.1108/itse-05-2020-0070>
37. Sofat, Rajni and Sharma (2020). A study on perception of academicians towards online education courses. *The Online Journal of Distance Education and e-Learning*, 8(1),1-9. Retrieved From: <http://tojdell.net/journals/tojdell/volumes/tojdell-volume08-i01.pdf#page=8>
 38. Soyemi, O., Ojo, A., & Abolarin, M. (2018). Digital Literacy Skills and MOOC Participation among Lecturers in a Private University in Nigeria. *Library Philosophy and Practice* (e-journal). Retrieved from <https://digitalcommons.unl.edu/libphilprac/1851>
 39. Stephen, D. (2008). *CCK08 - The distributed course - The MOOC guide*. <https://sites.google.com/site/themoocguide/3-ck08---the-distributed-course>
 40. Stephen, D. (2008). *CCK08 - The distributed course - The MOOC guide*. <https://sites.google.com/site/themoocguide/3-ck08---the-distributed-course>
 41. Subba Rao, S. (2006). Distance education and the role of IT in India. *The Electronic Library*, 24(2), 225-236. <https://doi.org/10.1108/02640470610660396>
 42. Thakur, R. K. (2018). A review on Indian scenario for MOOCs, open online courses & virtual education system. *International Journal on Future Revolution in Computer Science & Communication Engineering*, 4(2), 142-149.
 43. Varma, N. S., & Kataria, N. (2018). SWAYAM: A Step Towards Self Reliance. *International Research Journal of Marketing and Economics*, 5(8), 7-83, ISSN: (2349-0314).
 44. Virani, S. R., Saini, J. R., & Sharma, S. (2020). Adoption of massive open online courses (MOOCs) for blended learning: The Indian educators' perspective. *Interactive Learning Environments*, 1-17. <https://doi.org/10.1080/10494820.2020.1817760>
 45. Wu, D., & Hiltz, S. R. (2019). Predicting learning from asynchronous online discussions. *Online Learning*, 8(2). <https://doi.org/10.24059/olj.v8i2.1832>
 46. Yuan, L., & Shi-You, Q. (2017). Research on influencing factors of radical technology innovation-based on structural equation model. 2017 *International Conference on Management Science and Engineering (ICMSE)*. <https://doi.org/10.1109/icmse.2017.8574448>

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